Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

State Cooperative Program

Coleman-Beacon Plant

Background:

The Coleman-Beacon Plant site is located one half mile northwest of the City of Maize, Kansas. The site was discovered in November 1991 after Coleman initiated a site monitoring program to assess ground water quality. Volatile organic compounds (VOCs) were detected during this assessment and the presence of trichloroethene (TCE) and its degradation products was confirmed in subsequent investigations in February and November 1992.

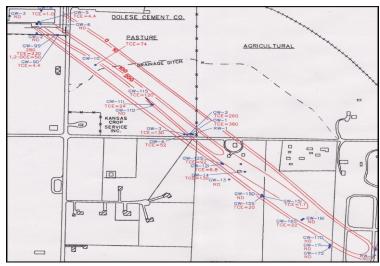
In July 1993, Coleman signed a consent order with the Kansas Department of Health and Environment (KDHE) State Cooperative Program to investigate and remediate the VOC contamination in groundwater. The source of the contamination was found to be located in the vicinity of a vapor degreaser in the East Building of the plant. The contamination extended southeast from the source area to the southeastern portion of the Rolling Meadows Trailer Park property, a total distance of 4,150 feet. Sampling conducted by Coleman and KDHE determined that only one domestic well had been impacted with low levels of VOCs.

Solution:

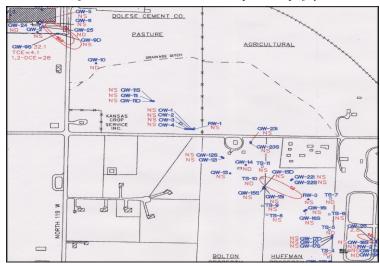
Coleman proposed a plan to KDHE in April 1994 for interim remedial measures to be implemented at the site in conjunction with conducting a comprehensive investigation. The interim action addressed the impacted domestic well by replacing with a new well outside the impacted area. As a precautionary measure, Coleman also installed granulated activated carbon (GAC) filtration units at four nearby domestic wells to protect drinking water supplies, including the water supply well at the Rolling Meadows Trailer Park. An interim remedial system began operation in July 1994 that pumped groundwater from the center and toe of the plume, piped it back to the Coleman plant to be treated through air stripping and GAC filtration. The treated water was then reinjected back into the aquifer upgradient of the plant. The interim system continues to operate as the final corrective



Air stripper tower and carbon vessel buildings at Coleman Facility



Extent of TCE contamination March 1994, pre-startup of system.



Extent of TCE contamination July 2001, near completion.

In addition to monitoring the systems progress, Coleman also regularly sampled the four domestic wells with the GAC units and a well at the City Building in Maize.

As of July 2002,monitoring results have shown that all VOC levels are below their respective safe drinking water standards. Based on the success of the system, Coleman is working to develop a plan for shut-down of the system to be submitted to KDHE at the end of 2002.

Benefits:

- Over 700 million gallons of groundwater treated
- The residents of Rolling Meadows park provided with safe drinking water supply
- Source of groundwater contamination eliminated